

National Environmental Public Health Tracking Program: Use of Indicators

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Public Health Surveillance

- **How do we measure progress towards the aim of public health to prevent disease & promote health?**
 - Idea of systematically observing, recording, collecting, & analyzing data for intervention stems from Hippocrates
- **What events should be under surveillance?**
 - An established & accepted classification system for health-related events is useful
 - Case definitions have informed infectious disease surveillance since the 17th century

Public Health Surveillance Objectives

- Estimate the magnitude of a health effect in the population at risk
- Understand the natural history of a health effect
- Detect health effect outbreaks, clusters or epidemics
- Document the distribution & spread of a health effect
- Generate hypotheses about etiology
- Monitor & evaluate interventions
- Monitor & detect changes & trends
- Assess quality & safety of health services
- Identify research needs & facilitate scientific research
- Facilitate planning

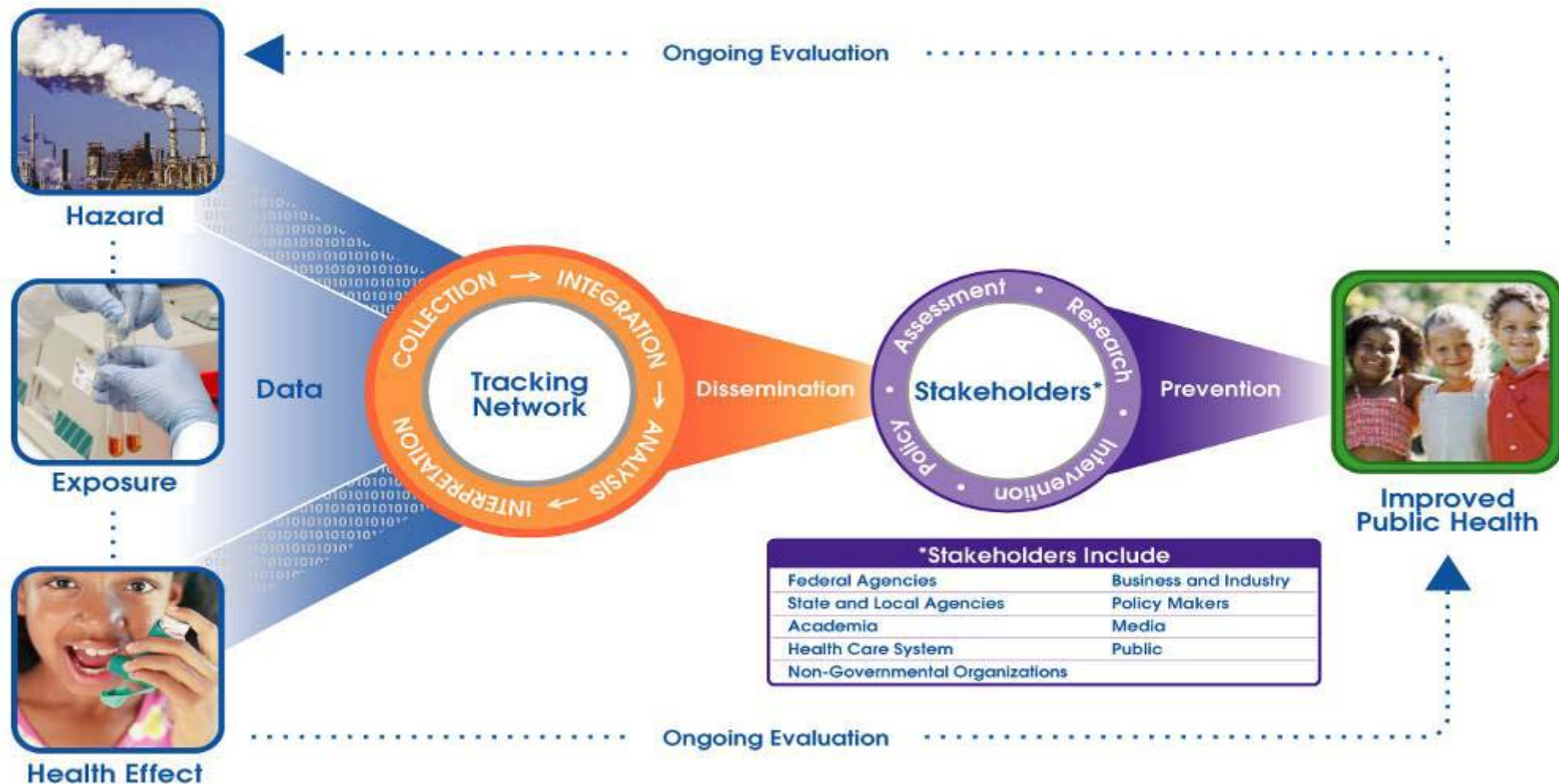
Indicators: System for Organizing Information

- Case (event) definitions: indicators of a specific health effect
- Factors that form the case (event) definition
 - Direct & indirect measures of an indicator
 - Person
 - Place
 - Time
 - Clinical signs and symptoms
 - Laboratory results
 - Other

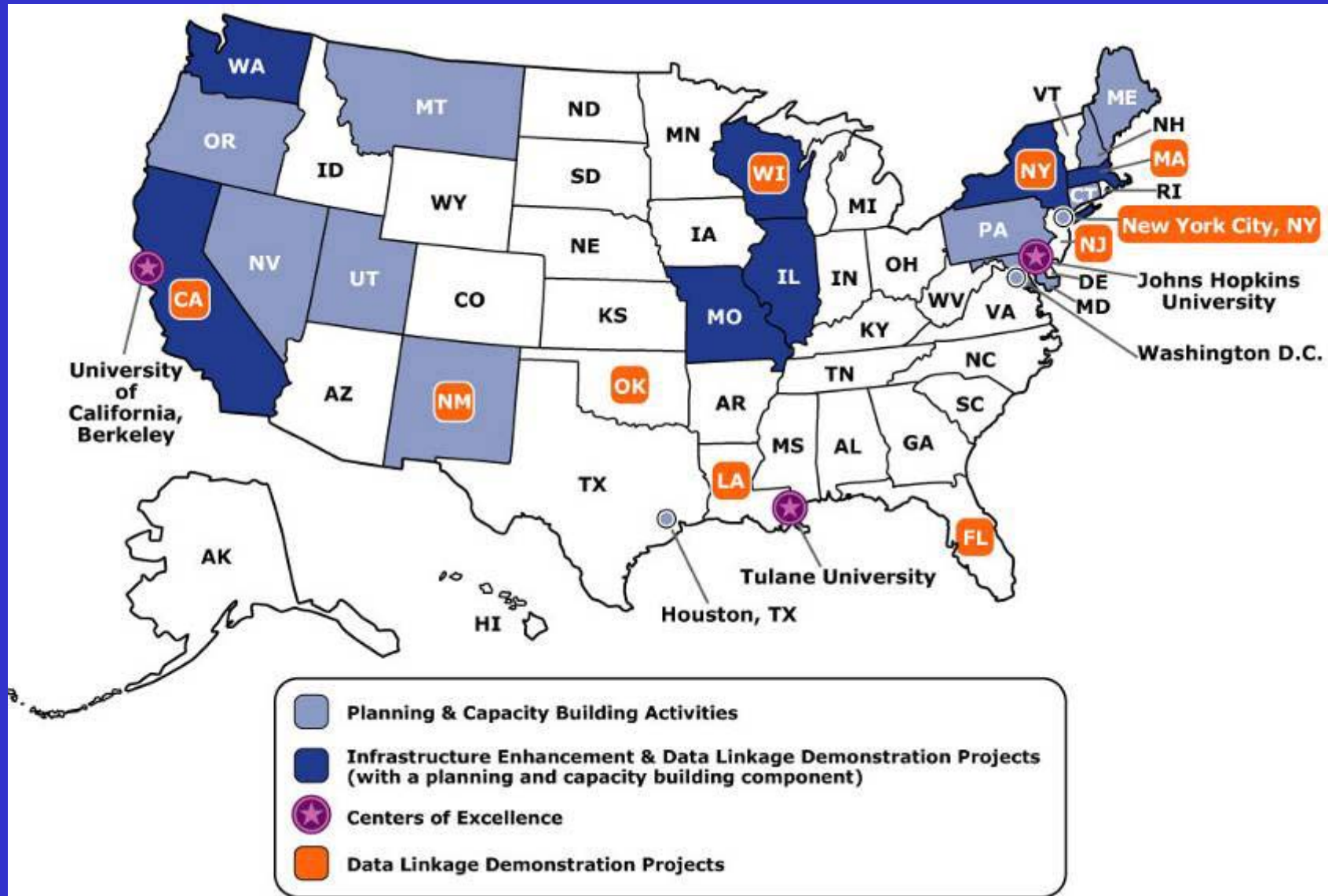
Tracking = Public Health Surveillance

- Environmental public health tracking is the ongoing, systematic collection, integration, analysis, interpretation of data about the following factors:
 - environmental hazards
 - human exposure to environmental hazards
 - health effects potentially related to exposure to environmental hazards
- Data must be disseminated to plan, implement, and evaluate environmental public health action

ENVIRONMENTAL PUBLIC HEALTH TRACKING



The National Environmental Public Health Tracking (EPHT) Program - 2004



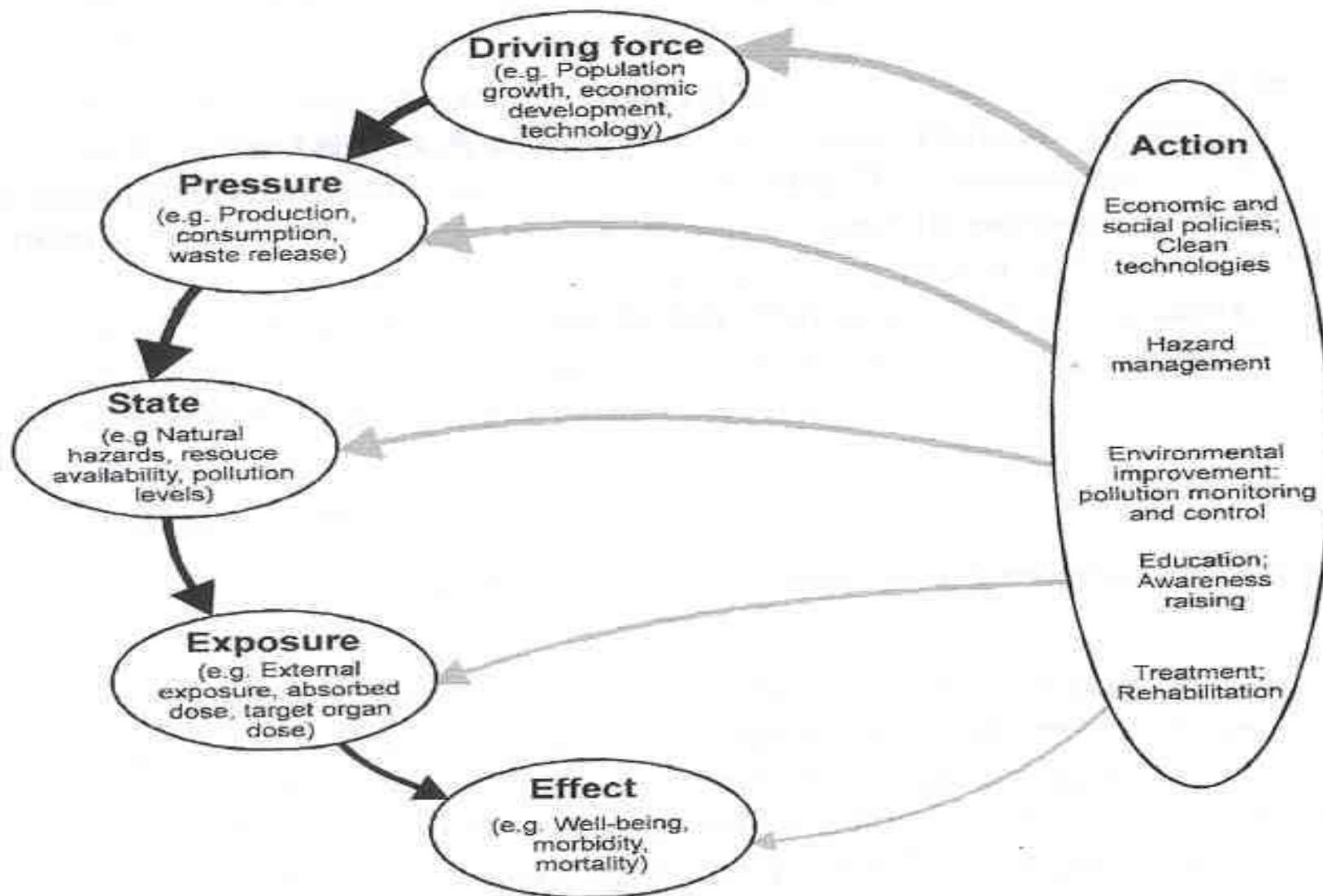
CSTE/CDC EPHI Project Key Features

- **Project started in 1999 prior to EPHT**
- **Endorsed by Council of State & Territorial Epidemiologists (CSTE)**
 - **Facilitates State Epidemiologists to report surveillance data to CDC**
- **Partner participation including EPA**
- **Project informed by existing efforts such as EPA, WHO, etc**
- **Addresses all possible environmental public health concerns**
 - **38 core Environmental Public Health Indicators (EPHIs)**
 - **Draft technical supplement available upon request from dcombs@cdc.gov**
 - **Optional EPHIs**
 - **Developmental EPHIs**
 - **Other CSTE/CDC indicator efforts**
- **Suggested measures**
- **Standard definitions when available**
- **Measurement criteria when available**
- **Potential data sources**

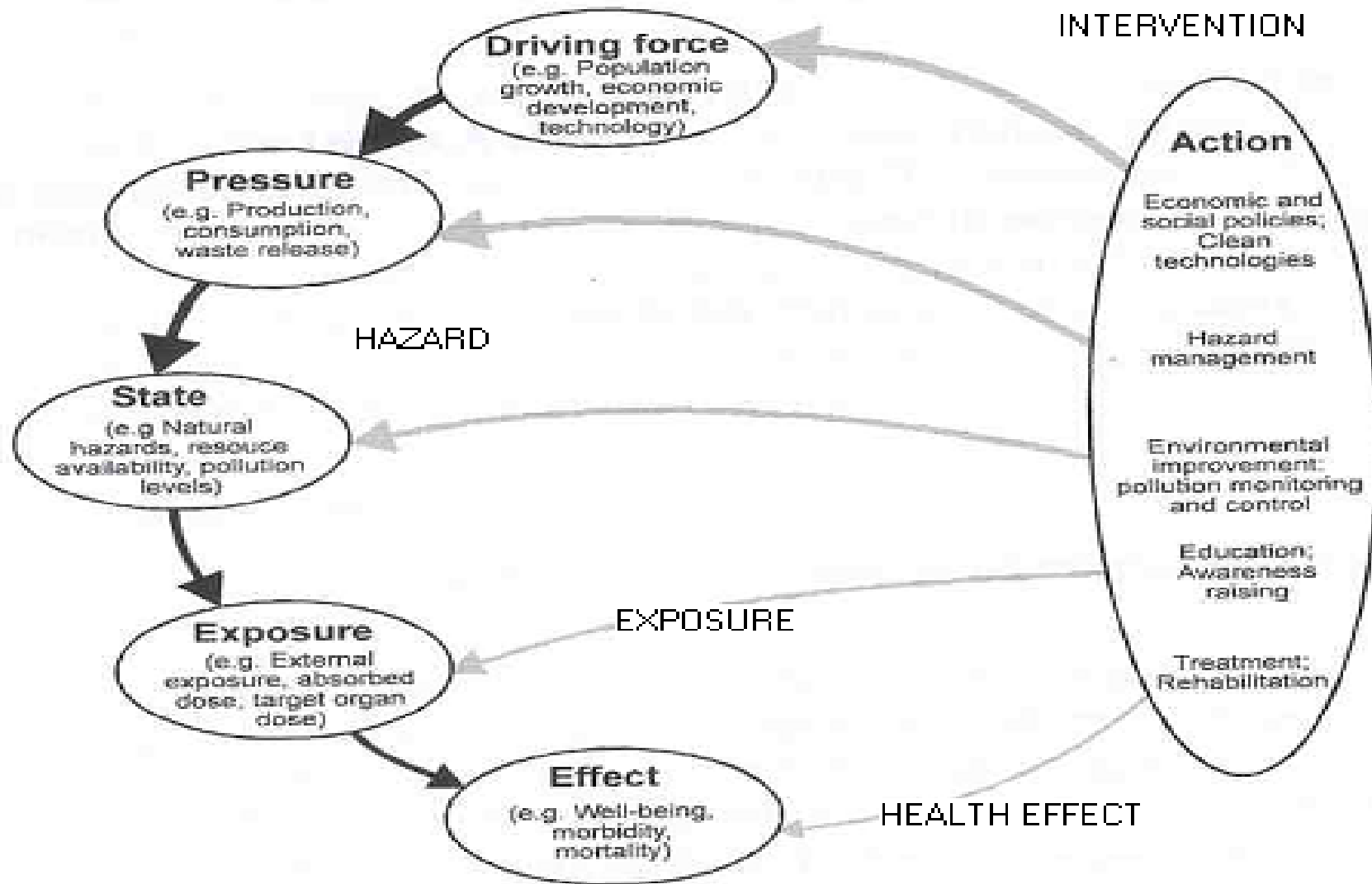
EPHT Indicator Recipient Activity Goals

- **Is the EPHI practical for your program?**
- **Does the EPHI meet your program's priority information needs?**
- **Does the EPHI produce efficient & valuable information?**
- **Does the EPHI provide an accurate measure of environmental public health?**

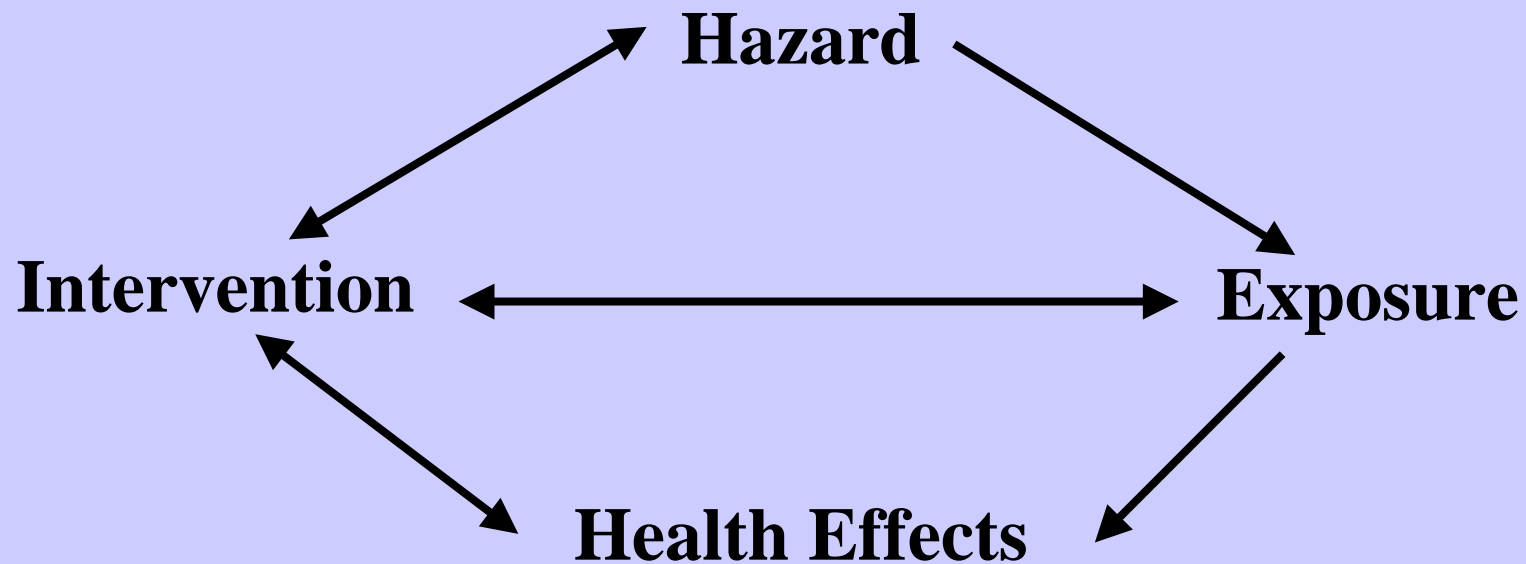
WHO “DPSEEA” (Pressure State) Model



CSTE/CDC EPHI Framework



CSTE/CDC EPHI Framework



CSTE/CDC EPHI Types

- Hazard: condition or activity that identifies exposure potential
- Exposure: biologic marker in human tissue or fluid that identifies presence of a potentially harmful substance(s)
- Health effect: disease or condition that identifies an adverse effect from exposure to a known or suspected environmental hazard
- Intervention: program or policy to minimize or prevent a hazard, exposure, or health effect

CSTE/CDC EPHI Topics

- Air, Ambient
- Air, Indoor
- Disasters
- Lead
- Noise
- Pesticides
- Sentinel Events
- Sun and Ultraviolet Light
- Toxics and Waste
- Water, Ambient
- Water, Drinking

Next Steps

- **CSTE Pre-Conference Day**
 - **June 6, 2004**
 - **EPHT Workshop**
 - **Oral reports from grantees on EPHI activity**
 - **Discuss lessons learned**
 - **Synthesize lessons learned to inform CSTE and EPHT**

For More Information

- www.cdc.gov/nceh/tracking
- www.cdc.gov/nceh/indicators/default.htm
- www.cste.org